Volume Contents

Volume 1 No. 1 1990

Editor's Introduction v

L. D. ZAVODNEY, A. H. NAYFEH, and N. E. SANCHEZ / Bifurcations and Chaos in Parametrically Excited Single-Degree-of-Freedom Systems 1

F. BENEDETTINI and G. REGA / Numerical Simulations of Chaotic Dynamics in a Model of Elastic Cable 23

B. BALACHANDRAN and A. H. NAYFEH / Nonlinear Motions of Beam-Mass Structure 39

F. PFEIFFER and A. KUNERT / Rattling Models from Deterministic to Stochastic Processes 63

W. V. WEDIG, Y. K. LIN, and G. Q. CAI / Necessary and Sufficient Conditions for Existence of Stationary Solutions of Some Nonlinear Stochastic Systems 75

R. A. IBRAHIM, Y. J. YOON, and MICHAEL G. EVANS / Random Excitation of Nonlinear Coupled Oscillators 91

Information for Authors 117

Volume 1 No. 2 1990

F. OLIVEIRA-PINTO and M. ADIBPOUR / Analytical Solutions of One-Dimensional Discrete Dynamical Systems with Chaotic Behaviour 121

ALEŠ TONDL and RADOSLAV NABERGOJ / Model Simulation of Parametrically Excited Ship Rolling 131

LAYNE T. WATSON / Globally Convergent Homotopy Algorithms for Nonlinear Systems of Equations 143

Volume 1 No. 3 1990

B. D. HEYDON, A. H. NAYFEH, and W. T. BAUMANN / An Adaptive Quenching Algorithm for a Nonlinear Single-Degree-of-Freedom System 193

G. X. LI and F. C. MOON / Fractal Basin Boundaries in a Two-Degree-of-Freedom Nonlinear System 209

Y. B. KIM and S. T. NOAH / Bifurcation Analysis for a Modified Jeffcott Rotor with Bearing Clearances 221

SLOBODAN R. SIPCIC / The Chaotic Response of a Fluttering Panel: The Influence of Maneuvering 243

VOLUME CONTENTS

Volume 1 No. 4 1990

IRADJ G. TADJBAKHSH and YI-MING WANG / Wind-Driven Nonlinear Oscillations of Cables 265

JINSIANG SHAW and STEVEN W. SHAW / The Effects of Unbalance on Oil Whirl 293

M. A. NAYFEH, A. M. A. HAMDAN, and A. H. NAYFEH / Chaos and Instability in a Power System – Primary Resonant Case 313

Volume 1 No. 5 1990

YUKIO ISHIDA, TOSHIO YAMAMOTO, TAKASHI IKEDA, and SHIN MURAKAMI / Nonstationary Vibration of a Rotating Shaft with Nonlinear Spring Characteristics during Acceleration through a Critical Speed (A Critical Speed of a Summed-and-Differential Harmonic Oscillation) 341

KEITH W. BUFFINTON / Parametric Excitation of Beams Moving over Supports 359

V. J. MODI and A. SULEMAN / System Modes and Dynamics of the Proposed Space Station Type Configurations 379

VINCENT T. COPPOLA and RICHARD H. RAND / Chaos in a System with a Periodically Disappearing Separatrix 401

Volume 1 No. 6 1991

CHRISTOPH PELCHEN and JÖRG WAUER / On the Dynamics of Rotating Circular Cable Structures 421

MARTIN BOTZ and PETER HAGEDORN / Multiple Body Systems with Flexible Members 433

R. HEUER, H. IRSCHIK, and F. ZIEGLER / Multi-Modal Approach for Large Natural Flexural Vibrations of Thermally Stressed Plates 449

F. M. L. AMIROUCHE and CHIN-WEI TUNG / Regularization and Stability of the Constraints in the Dynamics of Multibody Systems 459

PERNGJIN F. PAI and ALI H. NAYFEH / Three-Dimensional Nonlinear Vibrations of Composite Beams – I. Equations of Motion 477

Subject Index 503